

Comments offered by Davita after review of the DRAFT BSI <u>Guidelines for the Prevention of Intravascular Catheter-Related Infections:</u>

**Line 742**: Should state (added language in italics), "However, if infused rapidly **and in excess of catheter lumen volume**, concentrated citrate can result in serious hypocalcaemia, cardiac dysrhythmia, and death." Citrate at 30-44% is approved for use as a CLS in many countries other than the US, but the formulation is only available in small volumes. The notorious death from use of citrate occurred after administration of volume greatly in excess of lumen volume.

**Line 426, 1436** - Does not include ExSept as an alternative during dressing changes. Use of ExSept should be a consideration. Define what "ExSept" is, i.e.: electrolytic chloroxydizer (EC) sodium hypochlorite solution.

<u>Reference</u>: ExSept. The findings of a 2005 randomized clinical trial (n=121) comparing effectiveness of ExSept to Chlorhexidine in reducing colonization, exit site, and CVC related BSI was reported. (Astle, C., Jenson, L. (2005, Vol. 32, No.4). *Effectiveness of Sodium Hypochlorite in the Prevention of Catheter- related Infections*, Nephrology Nursing Journal, 518-525 (Vo. 32, No.4). Duration of study was three months. ExSept 10% was comparable to Chlorhexidine 0.5 with 70% alcohol for the incidence of catheter related infections. ExSept has less catheter-associated damage such as catheter cracking. ExSept is being used in dialysis facilities in Canada and the United States.

Note: Betadine or iodine based solutions or ointments must not be used with silicon catheters. Alcohol or alcohol based solutions or ointments must not be used with polyurethane catheters. Preventing damage to the CVC is critical. Mishkin, 2007 published a study where a total of 44 catheter lumens were evaluated assessing tensile strength after exposure to commonly used disinfectants. The electrolytically produced sodium hypochlorite solution, Alcavis 50/ExSept Plus, was the only solution shown to be compatible with all catheter materials resulting in a deviation of less than 10% for each of the different catheter types. Electrolytically produced sodium hypochlorite solutions were the only solutions in this study that did not alter the physical properties of any of the catheters after long-term exposure.

Electrolytically produced sodium hypochlorite solutions demonstrated to be effective in preventing catheter related BSI (Astle, C., Jenson, L. (2005, Vol. 32, No.4). *Effectiveness of Sodium Hypochlorite in the Prevention of Catheter- related Infections*, Nephrology Nursing Journal, 518-525) and prevent catheter damage that may occur when other types of solutions are used (Mishkin, G., Ronco, C. 2007, Disinfection *By Sodium Hypochlorite; Dialysis Applications* (Vol 154 pp. 97 – 102). Gaithersburg, Md.: Karger).

**Line 1460 - 1461**: Reference to showering – Reference to showering should be "*no showering for non-healed exit sites. For healed exit sites, showering is per physician discretion.*"

**Line 1502** - Catheter locks - seems reasonable in long term catheters with a history of multiple CRBSI. Line should read: "Use prophylactic antimicrobial lock solution *only* in patients with long term catheters who have a history of multiple, *frequent* CRBSI despite assuring optimal maximal adherence to aseptic technique [23, 211-228]. Category II ". 'Multiple' and 'frequent' should be quantified - how many is multiple; how often is frequent?